REMARKS

Entry of this Amendment and reconsideration are respectfully requested in view of the amendments made to the claims and for the remarks made herein.

Claims 1-11 are pending and stand rejected.

Claims 1, 8 and 18 stand rejected under 35 USC 112, first paragraph as failing to comply with the enablement requirement. The Office Action states that the "claim limitation 'a controller that causes the processor to maximize a power measure of the combined audio signal, wherein the controller is arranged to limit a combined power gain measure of the processed audio signal to a predetermined value without measuring an energy transfer...' is not supported in the further detail in the specification nor in any claim."

Applicant respectfully disagrees with and explicitly traverses that reason for rejecting the claims. Applicant submits that page 2, lines 3-21 provide sufficient teaching to one skilled in the art tp practice the invention claimed. Page 2, lines 3-21 state "[i]nsaid article use is made of an energy transfer function from the speaker ... under the assumption that this energy transfer will not change significantly ...The above mentioned energy transfer function has to be determined by measurement. Requiring measurements for each site, makes the deployment of products using this [existing] method quite cumbersome. The object of the present invention is to provide an audio processing arrangement in which no measurements have to be performed before deployment of the audio processing arrangement. To achieve this objective the audio processing arrangement ...comprises control means for controlling the processing means in order to maximize a power measure of the combined audio signal, and in that the control means are arranged for limiting a combined power gain measure of the processed audio signals to a predetermined value. By maximizing a power measure of the combined audio signal under the constraint that a combined power gain measure ... is limited to a predetermined value, no use of measured data has to be made."

Hence, the specification teaches that in the prior art teaches the measurement of an energy transfer function and that the present invention teaches maximizing the power under the constraint that a combined power gain measure limited to a predetermined value and no use of measure data is needed.

For at least this reason, applicant submits that the reason for the rejection has been overcome and respectfully requests that the rejection be withdrawn and the claims allowed.

Claims 1-5 and 7-10 stand rejected under 35 USC 103(a) as being unpatentable over [sic] in view of Kandeda (USP no. 5,208,864) in view of Kellerman (USP no. 5,602,962).

Applicant respectfully disagrees with and explicitly traverses the reason for rejecting the claims.

Kaneda teaches a method of detecting an acoustic signal, wherein first and second sound receiving units are located at substantially the same position and are used to output signals having different target signal power to noise power ratios. When differences between the powers of the signals output from the first and second sound receiving units fails within a predetermined range, reception of the target signal within the given period is discriminated (see Abstract).

Kaneda teaches a system of receiving a signal over a plurality of input devices wherein each input device is preceded by filter h_1-h_m (see Fig. 12). The filter coefficients are then adjusted to minimize the noise component of the received input signal (see col. 8, lines 10-32, which state, in part, "[w]hen outputs from the M microphone elements are denoted as U_1 to U_M, and characteristics of the filters 53_1 to 53_M are given as h_1 to h_M, a power x_1^2 of the signal is represented as follows: ... Judging from equations (2) and (3) the power n^2 of the noise component contained in the output signal x_1 is a second order function ... Therefore, filter control for minimizing the power n^2 of the noise component under the constraint results in well-known minimization problem." Kaneda further discloses that "[s]ince the signal v_1 to v_{M-1} contains the sole noise components. The noise component contained in signal u_1 is not affected by the subtracting operation... This means that the operation of the adaptive filters for minimizing the power of the output ... minimizes the power of the noise component contained in the output ... Thus, it is to be understood that the adaptive microphone array structure shown in Fig. 21 is a method for minimizing the noise component under the condition of x_1 = s." (see col. 9, lines 15-24).

8

Amendment
Serial No.09/196,064

Docket No.PHN16,638

Kellermann discloses a speech processing arrangement that has at least two microphones for supplying microphones signals formed by speech components and noise components to microphone signal branches that are coupled to an adder device used for forming a sum signal. Kellerman teaches that real-time computation of the weight factors eliminates any annoying delay during a conversation held using the speech processing arrangement. (see Abstract). With reference to col. 3, lines 45-col. 4, lines 55, which is referred-to in the Office Action, Kellerman teaches that the signal samples x are stored in a buffer memory and estimates for the amplitudes of the noises components are obtained by evaluating the sample values x. Estimates of the amplitudes of the speech components s are also determined. Weight factors, c, are dimensioned such that the so-termed signal-to-noise ratio (SNR) of the sum signal x on the output of the adder device is maximized. Determination of the weight factors is performed by maximizing the expression shown in col. 4, lines 40-45.

Hence, Kellerman teaches maximizing the SNR of the sum signal by appropriate selection of weighting factors. But fails to teach or suggest the maximized SNR is subject to any constraint.

The Office Action refers to col. 2, lines 1-12 for teaching the claim limitation "a combined power gain measure of the processed audio signals to a predetermined value.". However, contrary to the statements made in the Office Action, a reading of this section fails to teach or suggest limiting the combined power gain measure to a predetermined value, as is recited in the claims.

A claimed invention is prima facie obvious when three basic criteria are met. First, there must be some suggestion or motivation, either in the reference themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings therein. Second, there must be a reasonable expectation of success. And, third, the prior art reference or combined references must teach or suggest all the claim limitations.

Neither Kaneda nor Kellermann, individually or in combination, teach or suggest all the elements recited in the above referred-to claims, as neither Kandea nor Kellermann teach limiting a combined power gain measure of the processed audio signal to a

9

predetermined value. And neither reference provides any motivation to limit the combined power gain to a predetermined value.

Even if the teachings of Kaneda and Kellermann, were combined, the combined invention would teach a methods for adjusting the weighting factors. But would not include a material element claimed ("the combined power gain measure [limited] to a predetermined value.")

Having shown that the combination of Kaneda and Kellermann, fails to teach or suggest all the elements claimed, applicant submits that the reason for the rejection has been overcome and the rejection can no longer be sustained. Applicant respectfully requests withdrawal of the rejection and allowance of the claim.

With regard to the remaining independent claims, theses claims recited subject matter similar to that recited in claim 1 and were rejected citing the same references used in rejecting claim 1. Thus, the remarks made in response to the rejection of claim 1 are applicable in response to the rejection of the independent claims.

Applicant submits that for the remarks made in response to the rejection of claim 1, which are reasserted, as if in full, in response to the rejection of the remaining independent claims, the reason for the rejection of these claims has been overcome and the rejection can no longer be sustained. It is respectfully requested that the rejection be withdrawn and the claims allowed.

With regard to the remaining claims, these claims ultimately depend from the independent claims, which have been shown to be allowable over the cited references. Accordingly, the remaining claims are also allowable by virtue of their dependence from an allowable base claim.

Claim 6 stands rejected under 35 USC 103(a) as being unpatentable over Kaneda as modified by Kellerman and further in view of Kaneda (USP no. 4,536,887). Claim 11 stands rejected under 35 USC 103(a) as being unpatentable over Kaneda as modified by Kellerman and further in view of Anderson (USP no. 6,137,887).

The aforementioned claims depend from an independent claim discussed above and are therefore believed patentable for the same reasons. As shown above the independent claims are not obvious in view of the teachings of Kaneda and Kellermann

10

Amendment   Docket No.PHN16,638
Serial No.09/196,064

and the additional reference cited fail to provide any teachings to correct the deficiencies

in the combination of the teachings of Kaneda and Kellermann. Accordingly, the

aforementioned claims are also allowable by virtue of their dependence from an

allowable base claim.

     For all the foregoing reasons, it is respectfully submitted that all the present

claims are patentable in view of the cited references. A Notice of Allowance is

respectfully requested.

                                Respectfully submitted,

                                Dan Piotrowski
                                Registration No. 42,079

Date: December 9, 2005   By: Steve Cha
                                Attorney for Applicant
                                Registration No. 44,069

Mail all correspondence to:
Dan Piotrowski, Registration No. 42,079
US PHILIPS CORPORATION
P.O. Box 3001
Briarcliff Manor, NY 10510-8001
Phone: (914) 333-9624
Fax: (914) 332-0615

11